Dear Senator Kennedy, Representative Albis and Honorable Members of the Committee,

Thank you for the opportunity to testify in support of HB 5286.

Small plastic is a big problem. In 2012, researchers from the State University of New York at Fredonia and The 5 Gyres Institute discovered high concentrations of plastic microbeads traced back to personal care products in all The Great Lakes[1]. Subsequent research has documented microbeads in dozens of waterways across the country. Wherever scientists look, they seem to find microbeads.

Microbeads, designed to go down the drain, escape sewage treatment and are littered into the environment. How many are escaping? Scientists estimate that about 417 million plastic microbeads are discharged daily into the San Francisco Bay alone[2]. It stands to reason that wherever there is a large population near water, similar will be true.

Once in the environment, plastic works like a sponge for other toxic chemicals present in the water, concentrating pesticides, oil from your car, and flame retardants. Within a month, microplastic can be up to a million times more toxic than the ambient water surrounding it. Beyond absorbing toxins, anything made of plastic typically has additives that give it performance attributes: rigid, malleable, soft, or hard—anywhere from 4-80% of the weight of every plastic product you touch is additives. These additives are often toxic as well. In a short time, they desorb from the plastic and enter the water, where they become bioavailable to animals—making waterborne plastic the ultimate one two punch.

Plastic microbeads also resemble fish eggs, and we know from science that plastic particles are ingested by hundreds of animals, including numerous species of fish that humans consume[3]. After ingestion, the concentrated chemicals can transfer to the tissue of an animal causing endocrine disruption and liver damage[4]. Once

---

[1] http://www.marcuseriksen.com/wp-content/uploads/2013/10/Microplastic-pollution-in-the-surface-waters-of-the-Laurentian-Great-Lakes.pdf

[2] Based upon average estimates of microbeads found in final effluent and sewage sludge (Mason et al., unpublished data; Magnusson & Noren, 2014; Martin & Eizhvertina, 2014)

[3] http://www.int-res.com/articles/meps_oa/m485p155.pdf

[4] http://www.nature.com/srep/2013/131121/srep03263/full/srep03263.html

transferred, these toxins are difficult for animals to purge. For example, in mammals, the only way for the body to get rid of these toxins is through breast milk or the umbilical cord. Consequently, each subsequent generation carries a higher toxic burden. We also know that bigger fish eat smaller fish, magnifying that burden up the food chain. We are at the top of that food chain, and at the end of our fishing lines we catch those big fish to eat.

After the discovery of microbeads in The Great Lakes, concerned citizens started a campaign to eliminate this plastic from consumer care products. Through a variety of tactics, a coalition of advocates were able to convince Procter & Gamble, L'Oreal, The Body Shop, Colgate, and Johnson & Johnson to agree to phase the beads out. But these brands declined to say when they would do it or with what they would replace the plastic. The lack of a definite commitment from large companies, coupled with the fact that hundreds of products contain these plastic microbeads, inspired a coalition of agencies, all natural cosmetic manufacturers and nonprofits to put forward a policy that would prohibit the sale of consumer products containing microbeads. After all, what government would allow for products in commerce that are actually designed to be littered at the end of life?

But not all the bills currently being considered across the country actually address the problem—the giants of the cosmetic industry supports a bill that leaves a truck sized loophole for so-called biodegradable plastic such as PLA—the compostable corn cup you may have seen at a beer festival. The problem is that PLA does not biodegrade more effectively than traditional plastic in the environment; PLA needs an industrial composting facility to biodegrade properly. Industry supported legislation also leaves loopholes for other kinds of plastic including the same type found in cigarette filters. These plastics, if adopted to replace the status quo microbeads, will present the exact threat to our ecosystem that this legislation is meant to stop.

For nearly a year, industry would not admit that they were trying to replace plastic with plastic, choosing rather to spend massive amounts of money to kill microbead bills by confusing and misleading the public and legislators alike. Now that we know their intentions, we need to put an end to the dirty tricks and bait and switch policies they support. We have given them four years to do the right thing, and we do not want to be back here four years from now having the same debate because they refused to switch to an environmentally benign substitute. Instead, let's pass a responsible policy that will accomplish what it is meant to: stop plastic pollution and ensure that our shared waters remain uncorrupted for generations to come.

Sincerely,

Stiv J. Wilson
Campaigns Director
The Story Of Stuff Project
Stiv@storyofstuff.org

Mobile: 503.913.7381

Blake A. Kopcho
Campaign Manager
The 5 Gyres Institute
b.kopcho@gmail.com
Mobile: 805.708.3435